milestones.1 patient has a mild motor and language delay,and the child with the neonatal microcatheter rupture has a mild hemiparesis. The 2 children with residual A-V shunting have planned further embolizations
Conclusion: Treatment of neonatal AMVG with modern endovascular techniques in conjunction with specialized neuroanesthetic and neurointensive care results in improved outcomes with cure and normal neurological development. Multiple stages are often necessary. These patients require care by an interdisciplinary team in specialized centers devoted to this group of diseases.

TCT-549

Selective Basilar Artery Thrombolysis For Posterior Territory Stroke: Acute Stroke Registry From Western India

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Background: Posterior territory strokes are not only difficult to diagnose appropriately within early time frame but also to initiate early treatment.Basilar artery occlusion is associated with a poor prognosis. However, the advent of high-quality, reliable, and noninvasive technology (eg, MRI) has made its diagnosis possible early in the course of the condition, which has illustrated that some patients with partial occlusion have limited ischemic injury and, therefore, a better prognosis. We present our data of 31 patients treated within 3 hours to 12 hours time frame presenting with this condition.
Methods: Thirty one patients with clinical diagnosis of vertebro-basilar stroke presented to our hospital were enrolled from Jan 2008 till date. After a Brain CT scan report ruling out hemmorrhage, and performing an early MRI brain scan, these patients underwent selective basilar artery thrombolysis with Actilyse (Boehringer)delivered via a microcatheter in dose ranging 0.6mg/Kg to 0.9 mg/Kg body wt. All procedures were performed via femoral artery route. Mechanical disruption of thrombus was performed in selected cases. In all procedures, neurologist was present and procedures performed by interventional cardioogist. In the ensuing 24 hrs. all patinets underwent diffussion weighted MRI brain scan.
Results: Window period: 06 hrs Mean Age: 40 yrs (21 - 81) Survival: 66 % Acute Mortality: 25 % NINDS score: 25 —> 12 Mean procedure time: 25 minutes 2 yrs follow up data & *all tabulated results will be presented at conference
Conclusion: The morbidity and mortality of patients treated with intra-arterial thrombolysis is not all that different versus intravenous thrombolysis, although recanalization was achieved more frequently with intra-arterial thrombolysis. Selective intra arterial thrombolysis for posterior territory strokes is feasible, safe and effective. The procedures are best performed in context of neurologist and interventionalist “team” perspective.

TCT-550

Carotid Stent Placement (CAS) with or without Debris Aspiration Prior to Embolic Protection (EDP) Retrieval: A CHOICE Registry Subset Study

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Background: EPD is mandatory in patients undergoing CAS placement due to risk of cerebral embolization. Provisional debris aspiration to treat sluggish flow through a packed filter prior to EPD retrieval has been reported. Despite EPD, CAS still has increased risks of minor stroke compared to Carotid Endarterectomy. This may be due to debris particles trapped in the column of blood below the EPD that may emboli at the time of EPD retrieval. Routine debris aspiration during CAS placement prior to EPD retrieval may reduce adverse and neurological complications by removing potential embolic particles.
Methods: From 9/2007 to 6/2011, 94 patients had CAS under the CHOICE Registry in our institution. The first 52 patients had CAS without aspiration (NoDAG) and the 2nd consecutive group of 42 patients had routine debris aspiration (DAG) prior to EPD retrieval. All patients had NIH scale stroke exams prior to CAS, at 24hrs, and 30 days post procedure. The CHOICE Registry data was reviewed to compare adverse events and neurological complications between the NoDAG and the DAG group.
Results: All 94 patients had successful CAS with EPD per CHOICE protocol. The DAG group also had successful aspiration using the Fetch or the Xpress-way catheter by removing 20cc of blood prior to EPD retrieval. There are no major or minor strokes reported in both groups. One patient died in the NoDAG within 30 days of the procedure due to a cardiac event. Four patients in the NoDAG group had minor neurological deficits (deviation by 1 point in the NIH scale) that occurred at 24 hours and resolved at 30 days. There are no reported deaths or minor neurological deficits in the DAG group. These yielded adverse events of 5/52 in the NoDAG and 0/42 in the DAG with a p value of 0.06 using the Fisher’s Exact Probability Test.
Conclusion: Routine debris aspiration during CAS placement is safe and may reduce minor transient neurological deficits by removing potential embolic particles before EPD retrieval. Large scale clinical study is needed to evaluate routine use of debris aspiration during CAS placement.

TCT-551

Inflammatory Markers Predict Future Cardiovascular Events in Patients Undergoing Carotid Stenting

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Background: It is well recognized that inflammation plays a crucial role in atherosclerotic disease. The aim of this study was to assess whether in patients severe carotid stenosis and non significant coronary artery disease undergoing carotid stenting, inflammatory markers predict atherosclerotic disease activity after carotid treatment
Methods: Fifty-five consecutive patients (mean age 69+/-8.3 years, 26 men) with severe carotid stenosis and non significant coronary artery disease were treated with carotid stent implantation(CAS).Patients were followed-up for a period of five years for the occurrence of cardiovascular events.
Results: A significant correlation between quantitative analysis of debris entrapped in the filters and inflammatory markers was found. Moreover, the number of particles per filter, the total particles area and the mean particle axis per filter were significant higher in patients with cardiovascular events at the follow-up as compared to patients without events (87 vs 32, p=0.006; 50118.7 vs 17782, p=0.002; 33.9 vs 30.2; p= 0.03). At five-year follow-up we recorded cardiovascular or neurological events in 11 patients (20%). Higher pre-procedural levels of high-sensitivity C-reactive protein (hs-CRP), soluble interleukin-6 receptor (SR-IL) and interleukin-6 (IL-6) were significantly associated with clinical events at follow-up (p=0.0008; p=0.05; and p= 0.02, respectively). In particular hs-CRP measured at 24 and 48 hours after carotid stenting showed a significant correlation with clinical events. Also pre-procedural intracellular adhesion molecule-1 (ICAM-1) and circulating vascular cell adhesion molecule-1 (VCAM-1) blood concentration were significant correlated with a worse prognosis at follow-up (p=0.04 and p=0.03, respectively).
Conclusion: In patients with severe carotid stenosis and non significant coronary artery disease, inflammation is associated with atherosclerotic disease activity and a worse prognosis. IL-6, SR-IL, ICAM-1 e VCAM-1 and hs-CRP levels at baseline, 24 and 48 hours after carotid stenting are predictive of neurological and cardiovascular events at the follow-up.

TCT-552

Fast track Carotid Surgery is the gold standard for High-risk (HRP) Carotid Artery Intervention: Five year Cost-effectiveness and Quality Stroke Free Survival comparison

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Background: We aim to conciliate CAST, CEA and OMT in high-risk symptomatic patients. Primary endpoints were stroke, myocardial infarction or death. Secondary endpoints were cost per QALY, re-intervention rate, and patency.
Methods: From Oct01- Oct08, 847 patients were evaluated with carotid stenosis>60%. The Predicted Probability of receiving CEA, CAST, or OMT was tabulated for all patients using multiple logistic regressions, controlling for co-morbidity and anatomical factors. Propensity scoring was used to adjust for baseline characteristics and selection bias by matching co-variables, creating a pseudo-randomized control design. From 306 CEA, 39 CAST and 275 OMT, we matched 55 CEA, 34 CAS and 67 OMT by propensity score. 19 (6.3%) had bilateral interventions. Co-morbidity Severity Score were similar between groups (p>0.05) All interventions were performed within 14 days of initial presentation. Duplex ultrasound was the sole preoperative imaging modality used to quantify plaque-morphology and stenosis.
Results: Following intervention, 5-year stroke-free rate was 99.1%(95%CI 99.6-99.9%), stroke-free survival was 90.6%(95%CI 85.9%-93.9%) and primary patency was 94.6%(95%CI 90.5%-97.0%). 5-year stroke-free survival was significantly improved with CEA (90.6%) compared to OMT (44.3%, p<0.0001). Cox-proportional hazards ratio showed age >80years (p<0.001), female gender (p<0.04) and echolucent plaque material (p<0.01) were associated with reduced stroke-free survival. Q-TWiST and cost per QALY were comparable but in favor of CEA over CAST (p>0.05) and were significantly improved with CEA compared to OMT (p<0.0001) and CAST (p<0.001).
Conclusion: OMT does not prevent future stroke in patients with severe carotid artery disease. Indications for CAST are limited. CEA remains the gold standard in suitable patients with recently symptomatic carotid artery stenosis with superior 5-year stroke-free survival compared to CAST or OMT.

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